BIOGRAPHICAL SKETCH

NAME: Ted Martonen **POSITION TITLE:** Senior Research Scientist

EDUCATION/TRAINING

Institution	Degree	Year	Field of Study
University of Michigan	B.S.	1966	Mathematics
University of Michigan		1966	Engineering
Michigan State University	M.S.	1971	Mathematics
University of Rochester		1973	Biophysics
University of Rochester	Ph.D.	1977	Biophysics

PROFESSIONAL EXPERIENCE:

1967-69	Mechanical Engineer, E.I. Dupont, Wilmington, DE
1973-75	Mechanical Engineer, Institute for Aerobiology, Grafschaft, Germany
1976-81	Adjunct Associate Professor, University of California, Irvine
1981-82	Senior Scientist, Battelle Pacific Northwest Laboratories, Richland, WA
1982-84	Senior Research Scientist, Northrop Services, Inc., Research Triangle Park, NC
1984-Present	Adjunct Professor , Dept. of Medicine, University of North Carolina, Chapel Hill, NC
!984-Present	Senior Research Scientist, U.S. Environmental Protection Agency, Research Triangle Park, NC

PROFESSIONAL SOCIETIES:

International Society for Aerosols in Medicine
American Association for Aerosol Research
Society for Mathematical Biology

SELECTED AWARDS AND HONORS:

2003	U.S. EPA Gold Metal for Particulate Matter (PM) Research
1997	Smithsonian Institution Award in Medicine

INVITED LECTURES/SYMPOSIA:

2003	Oxford University, United Kingdom
2002	Aerosol Therapy Conference, Institute for International Research, Boston, MA, USA
2002	Symposium on Diabetes, Institute for International Research, San Diego, CA, USA
2001	International Society for Aerosols in Medicine, Interlaken, Switzerland
2000	World Health Organization Workshop, Munich, Germany
1999	Symposium on Inhaled Proteins, Institute for International Research, San Diego, CA, USA

ASSISTANCE/LEADERSHIP PROVIDED TO THE SCIENTIFIC COMMUNITY:

Associate Editor (Journal)	Cell Biochemistry and Biophysics (Humana Press)
Editorial Board (Journal)	Particulate Science and Technology (Elsevier)
Editorial Board (Journal)	Inhalation Toxicology (Taylor & Francis)
Associate Editor (Textbook)	Advances in Computational Bioengineering Series (WIT Press)

ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY:

Dr. Martonen was the recipient of numerous (1994, 93, 90, 86) Scientific and Technological Achievement Awards from the Scientific Advisory Board of the U.S. EPA.
To demonstrate leadership within the EPA and facilitate collaborations with national institutions of higher learning,

Dr. Martonen mentored the work of postdoctoral grantees conducting research in EPA laboratories. Also, he served on the dissertation committees of students performing doctoral research.

To demonstrate technical assistance within the EPA and foster cooperation with international scientific and medical communities, Dr. Martonen served as Editor of two textbooks titled Medical Applications of Computer Modelling: Cardiovascular and Ocular Systems, WIT Press, Southampton, UK (2000) and Medical Applications of Computer Modelling: The Respiratory System, WIT Press, Boston, USA (2001).

As an indicator of scientific creativity and leadership within the EPA, Dr. Martonen has authored several independent grants funded by the Office of Environmental Information. The grants have been valued at about one million dollars per year, manifest in computer time, software licenses, and personnel costs at the National Computer Center.

PUBLICATIONS (From January 1, 1998 to present, out of a total of 165 publications):

Martonen, T.B., and Katz, I.M. A nonhuman primate aerosol deposition model for toxicological and pharmaceutical studies, Inhal. Toxicol. 13: 307-324 (2001).

Musante, C. J. and Martonen, T.B. Computational fluid dynamics in human lungs: II. Effects of airway disease. p. 147-164. In Medical Applications of Computer Modelling: The Respiratory System. Ed. T.B. Martonen, WIT Press, Southampton, UK (2001).

Martonen, T.B., Guan, X., and Schreck, R.M. Fluid dynamics in airway bifurcations: I. Primary flows, Inhal. Toxicol. 13: 261-279 (2001).

Schroeter, J.D., Musante, C.J., Hwang, D., Burton, R., Guilmette, R., and Martonen, T.B. Hygroscopic growth and deposition of inhaled secondary cigarette smoke in human nasal pathways, Aerosol Sci. Technol. 34: 137-143 (2001).

Martonen, T.B., and Schroeter, J.D., Deposition of inhaled particles within human lungs, pp. 55-98, In: Sourcebook on Asbestos Diseases, Vol. 23, Eds. G.A. Peters and B.J. Peters, Matthew Bender & Co. (LexisNexis Group), San Francisco, CA, USA (2001).

Martonen, T.B., Quan, L., Zhang, Z., and Musante, C.J. Flow simulation in the human upper respiratory tract, Cell Biochem. Biophys. 37: 27-36 (2002).

Segal, R.A., Martonen, T.B., Kim, C.S., and Shearer, M. Computer simulations of particle deposition in the lungs of chronic obstructive pulmonary disease patients, Inhal. Toxicol. 14: 705-720 (2002).

Martonen, T.B., Zhang, Z., Yue, G., and Musante, C.J. 3-D particle transport within the human upper respiratory tract, J. Aerosol Sci. 33: 1095-1110 (2002).

Schroeter, J.D., Fleming, J.S., Hwang, D., and Martonen, T.B. A computer model of lung morphology to analyze SPECT images, Comp. Med. Imag. Graph. 26: 237-246 (2002).

Martonen, T.B., Zhang, Z., Yue, G., and Musante, C.J. Fine particle deposition within human nasal airways, Inhal. Toxicol. 15: 283-303 (2003).

Martonen, T.B., and Schroeter, J.D., Risk assessment dosimetry model for inhaled particulate matter: I. Human subjects, Toxicol. Letters 138: 119-132 (2003).

Martonen, T.B., and Schroeter, J.D., Risk assessment dosimetry model for inhaled particulate matter: II. Laboratory surrogates (rat), Toxicol. Letters 138: 133-142 (2003).